What is claimed is:

1. A data transforming system, including:
    a plurality of receive interfaces configured to receive data;
    a transformation module configured to transform the received data into
    modified data recognizable by a target system; and
    a transmit interface configured to send data to the target system;
wherein the modified data includes a first portion of data from a first receive interface
and a second portion of data from a second receive interface, and is configured
according to a predetermined format of the target system.

2. The data transforming system of claim 1, wherein the transformation module is
    configured to preprocess the received data and to provide optimized data to the
    target system, where the optimized data includes the first portion and second
    portions of data, and each of the first and second portions of data represents an
    automated selection of optimal data from corresponding portions of received data
    from the first and second receive interfaces.

3. The data transforming system of claim 1, wherein the first received data is at least
    received from a local source.

4. The data transforming system of claim 1, wherein the second received data is at
    least received from a remote source.

5. The data transforming system of claim 1, wherein the first and the second
    received data are received from a local source and a remote source, respectively.

6. The data transforming system of claim 1, configured to execute the transformation
    to generate emulated data recognizable by the target system.

7. The data transforming system of claim 1, wherein the transformation module includes:

    at least one receive interface to receive the first and second received data;

    a logic module to process the first and second receive data; and

    at least one transmit interface to transmit optimized data.

8. The data transforming system of claim 1, further including a third interface configured to send data to a plurality of other data transforming systems.

9. The data transforming system of claim 1 wherein the target system is a combat system.

10. The data transforming system of claim 1 wherein the received data includes at least one track file.

11. The data transforming system of claim 3, further including an override module configured to provide operator-selected data in place of at least one track of the automated selection of optimal data.

12. The data transforming system of claim 3, including logic configured to provide the first received data to the target system through bypass logic of the data transforming system.

13. The data transforming system of claim 1 wherein said data transforming system is a banking system.

14. An integrated plurality of data transforming systems and associated target systems wherein each data transforming system includes:

    a plurality of receive interfaces configured to receive data;

    a transformation module configured to transform the received data into modified data recognizable by a target system; and

a transmit interface configured to send data to the target system;

wherein the modified data includes a first portion of data from a first receive interface and a second portion of data from a second receive interface, and is configured according to a predetermined format of the target system.

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15.   The integrated plurality of data transforming systems and associated target systems of claim 14, wherein the transformation module of the data transforming systems is configured to preprocess the first and second received data and to provide optimized data to the target system, where the optimized data includes the

10   first portion and second portions of data, and each of the first and second portions of data represents an automated selection of optimal data from corresponding portions of data from the first and second receive interfaces.

16.   An integrated plurality of data transforming systems and associated target

15   systems wherein each data transforming system includes:

a plurality of receive interfaces configured to receive data;

a transformation module configured to transform the received data into modified data recognizable by a target system; and

a transmit interface configured to send data to the target system;

20   wherein the modified data includes a first portion of data from a first receive interface and a second portion of data from a second receive interface, and is configured according to a predetermined format of the target system; and

wherein additional computer systems are integrated into the integrated plurality of data transforming systems.

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17. The integrated plurality of data transforming systems, associated target systems and additional computer systems of claim 16, wherein the transformation module of the data transforming systems is configured to preprocess the first and second received data and to provide optimized data to the target system, where the optimized data

30   includes the first portion and second portions of data, and each of the first and second

portions of data represents an automated selection of optimal data from corresponding portions of data from the first and second receive interfaces.

18. A method of generating and transmitting data derived from a first set of received local data and a second set of received remote data including the steps of:
generating automatically optimized data from the first and the second set of received data;
transforming the optimized data into data recognizable to a target system; and providing the data recognizable to the target system to the target system.

19. The method of claim 18, where the signals include records.

20. The method of claim 18, wherein the received signals include local and remote signals.

21. The method of claim 18, wherein the signals include real-time signals.

22. The method of claim 18, wherein the transformation is performed by providing emulated data recognizable by the target system to the target system.

23. The method of claim 18, wherein the target system is a combat system.

24. The method of claim 18 wherein the first and second sets of received data include track files.

25. The method of claim 18, wherein including user selection of a least one piece of data.

26. The method of claim 18, further including the step of providing the first set of received data to the target system bypassing the transformation module.

27. A system for integrating a plurality of computer-based systems including:
   means for receiving data from a plurality of interfaces;
   means for transforming the received data into optimized data; and
   means for sending the optimized data to a target computer.

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28. The system of claim 27, wherein the means for receiving data are interfaces to sensors and networks.

29. The system of claim 27, wherein the means for receiving data are interfaces

10   connected to other computer-based systems.

30. The system of claim 27, wherein the means for sending data are channels to a computer-based target system.

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31. A method for integrating naval and maritime combat platforms including:
   implementing a common network interface on a plurality of naval combat systems,
   the network interface configured to:

20   a. receive signals and messages including track data from a plurality of sources;
   b. optimize the signals and messages;
   c. generate a track file that includes the optimized signals and messages; and
   d. emulating the signals and messages that a host combat system is

25   configured to receive.